

# **Instruction for Use of e-book**

**You are to view this program independently during this period.**

**You can only navigate forward through this program as there will not be time to go back. To move to the next page, click on the red arrow located in the lower left corner, as the one on this page.**



**Prepared for Montana Office of Public Instruction by Frederik R. Mottola**

**Montana Office of Public Instruction  
presents**

# **e-book Periods 11-14**

## **Phase Two Skid Monster Advanced Driving Training**

**developed by**

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National Institute for Driver Behavior**

Photos courtesy of Montana Department of Transportation



## Use Reference Points



All of these views are taken from the driver's seat of a Chevy Tahoe SUV

**Q4-1. Where do you think the front bumper is in relation to the curbline?**

- A. Two feet before the curbline
- B. Even with the curbline
- C. Two feet beyond the curbline
- D. More than two feet beyond the curbline

**Click on the letter to indicate your selection: A B C D**

Response to Q4-1. **Yes,** B is the correct response. The front of the Tahoe is even with the curb.



**Q4-2 Which photo shows a reference point that gives a reliable view of the vehicle to the curbline?**

**To respond, click on the photo of your choice.**

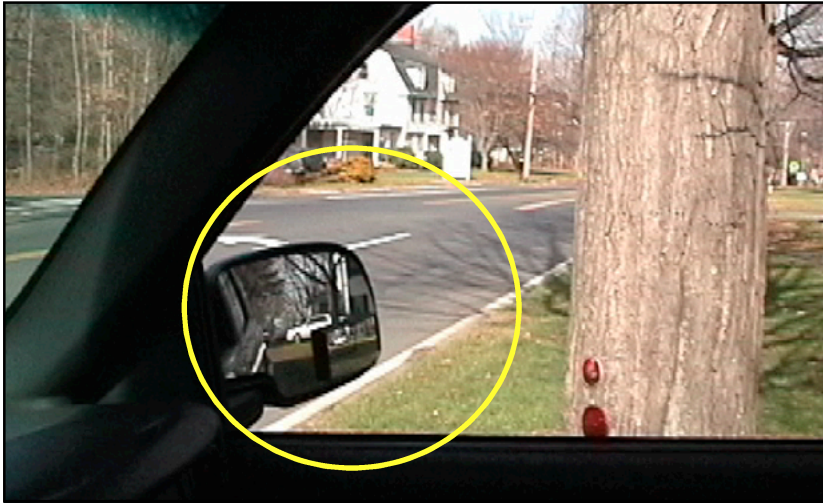


**Response to Q4-2. Which photo shows a reference point that gives a reliable view of the vehicle to the curbline?**

**No,** this is not a correct response because we are not able to see some part of the vehicle in relation to the road. Go back and try again.



Response to Q4-2. **Yes,** This photo shows a reference point that will give reliable information.



The reference point is the passenger sideview mirror in alignment with the curb.

When the mirror appears to be even with the curb, the front of the vehicle will be even with the curb.

### **Standard Reference Points**

The reference points presented in this program are shown the way most drivers will see them. They are our "standard" reference points. When attempting to discover a reference point, first use the "standard" reference point. If the "standard" reference point was accurate for you, continue to use it. If any reference point we cite in this program varies, then make note of your "personal" reference point. It won't be more than a few inches away from the "standard" reference point. Once you succeed, remember the correct picture of your "personal" reference point for future use.

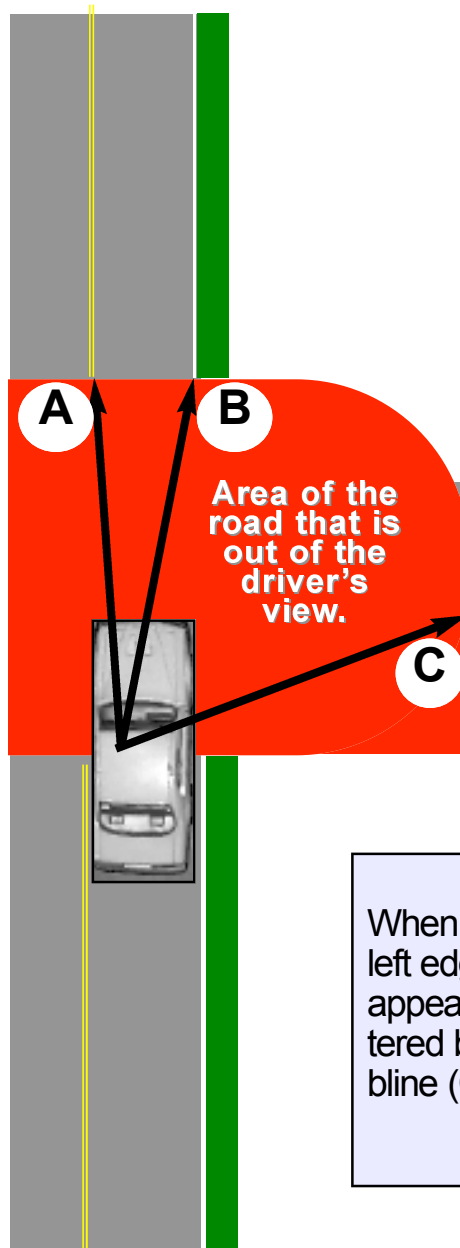


## Reference Point Usage

Drivers cannot see the actual position of the vehicle in relation to the roadway. The reason for this is that the driver's view of the road is blocked by the structure of the vehicle such as the dashboard, the hood of the vehicle, and the window height. Reference points can be developed to serve as a guide to overcome the optical illusions a driver encounters.

## Definition of Reference Points

From the driver's seat, identify how some part of the vehicle relates visually to some part of the roadway to know where the vehicle is actually located.



The red area illustration to the left shows the amount of road to the front and sides of the vehicle that the driver is not able to see.

## Three Standard Reference Points

When the car is 3-6 inches from the yellow line (A) it appears to be 1-foot from the left edge of the hood. When the right tires are 3-6 inches from the curb (B) the curb appears to be in the center of the hood. The steering wheel appears to be centered between lines A and B. When the front bumper is even with the crossing curblane (C) the curb appears to be aligned with the passenger side mirror.



**Response to Q4-2. Which photo shows a reference point that gives a reliable view of the vehicle to the curbline?**

**No,** this is not a correct response because we only see the front of the vehicle to the road, and not to the curbline, which creates an optical illusion making the vehicle appear further into the road than it is. Go back and try again.







**Photo A** shows the forward reference point when the front bumper is even with the curblin.

Notice where the forward reference point is in relation to the curblin in **photo B**.

**Photo C** shows the Tahoe is positioned about one foot beyond the curblin when the reference point is seen as in photo B. This slightly more forward position gives the driver a significantly better view.

Notice the better view the driver is able to get by moving the vehicle slightly beyond the curblin. The driver is able to see to the target area, which means there will be two or more seconds of time to detect an approaching vehicle. Using reference points we can tell exactly where the vehicle is placed.



**When the Tahoe is 3-6 inches away from the curb the reference point is the bend in the center of the drivers windshield wiper (see the arrow in the lower photo).**





**You will discover reference points on this truck today. What will you see to prove that the front bumper is even with the line?**



Click when ready



**When the front bumper is even with the line  
you will see the line appear like this.**



Click when ready



**When the right tires are a few inches away from the edge of the road you will see the line appear near the center of the hood, as shown here.**



Click when ready





**This is the outside view.**



Click when ready





**Knowing reference points will allow you to accurately position the vehicle without being intimidated by the guardrail.**



Click when ready



**It appears as if the driver of the car ahead, has little awareness of where the tires are to the roadway. Notice how far over the yellow line they are.**



Click when ready





**Notice how unfriendly the shoulder of the road is at curve as compared to where our car is at the present time. Knowing reference points will give you the skill to keep the car on the road.**



Click when ready



**The driver causes the oncoming camper to move almost to the shoulder's edge.**



Click when ready



**If you run off the road with all four tires, and there is a down slope, brake and turn away from the road to reduce speed before attempting to get back on to the road.**



Click when ready

**Click on  
the screen  
to the right  
to begin a  
movie.**

Click when  
movie ends.







**Evaluate each of the following photos. If you were the driver and your tires ran onto the shoulder, what decisions would you make? Would you turn back onto the road or would you turn away from the road and brake? The decision would be based upon whether you have a level or down slope shoulder.**



Click when ready



Click when ready





**Turn away from the road and brake lightly.**



Click when ready



Click when ready





**Turn away from the road and brake to a stop.**



Click when ready



Click when ready





**Turn towards the road using the off-road recovery method. No braking until you are back on the solid pavement.**



Click when ready





Click when ready



**You have no choice for this situation. Use your reference points, stay alert, you don't want to crash into the guardrail, which will result in only bad things.**



Click when ready





Click when ready





**Turn away from the road slightly and brake lightly.**



Click when ready



Click when ready





**Good luck with this one. With all the boulders and down slope it would be most likely to cause your vehicle to roll over. If you have your safety belts on you increase your chances of surviving.**



Click when ready





Click when ready



**You may get lucky with this one if you can steer away from the road and avoid hitting the larger boulders. If you have your safety belt on it will keep you behind the steering wheel to give you an opportunity to steer around the boulders.**



Click when ready

**No,** this is not a correct response. Go back and try again.





**No,** this is not a correct response. Go back and try again.



**No,** this is not a correct response. Go back and try again.



**No,** this is not a correct response. Go back and try again.





# Transition Pegs

- A transition peg identifies the placement of the vehicle to the target area while a turn is being made.
- A transition peg gives you a visual reference to determine the precise moment at which to make a change (transition) in steering, acceleration or braking actions that will best keep the car in balance.
- **The transition peg while making a right turn is the rearview mirror** aligned with the target area.
- **The transition peg while making a left turn is the driver's side corner post** when it is aligned with the target area.

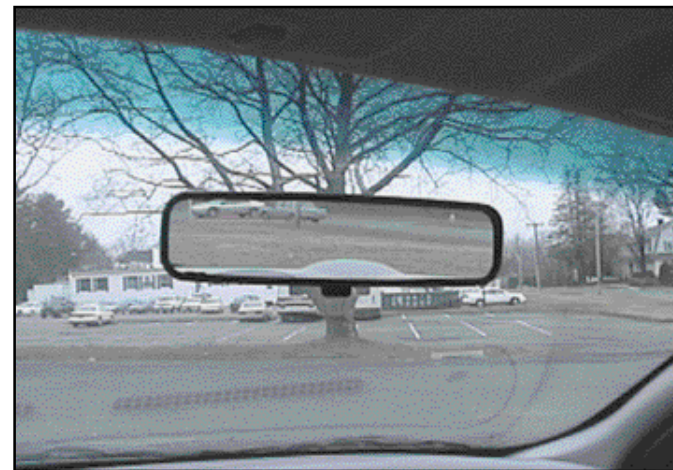
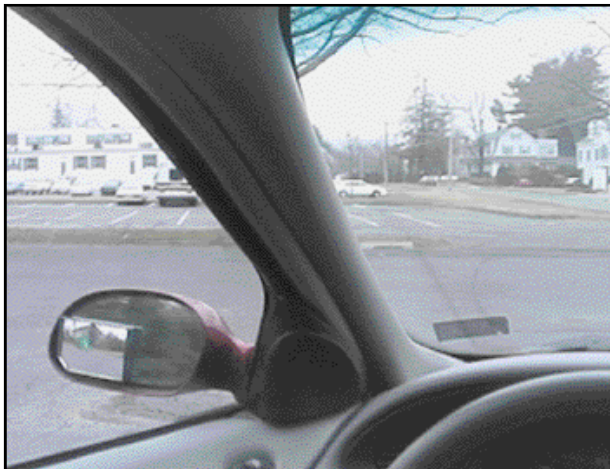


Click when ready



**We are in a parking lot practicing the use of Transition Pegs.**

**The tree, as shown in the photo to the left, is the target.**

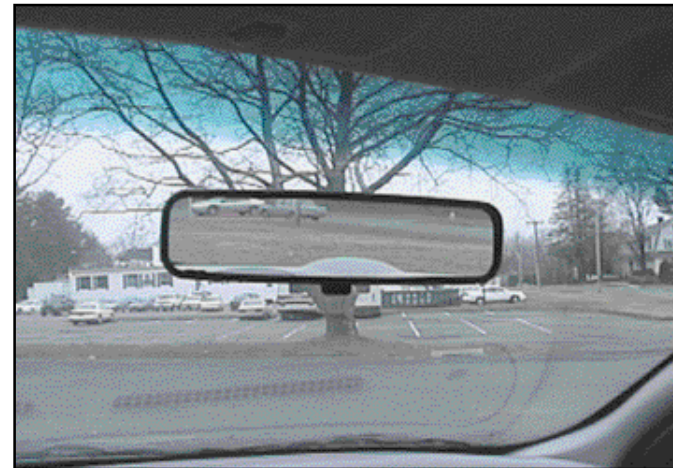
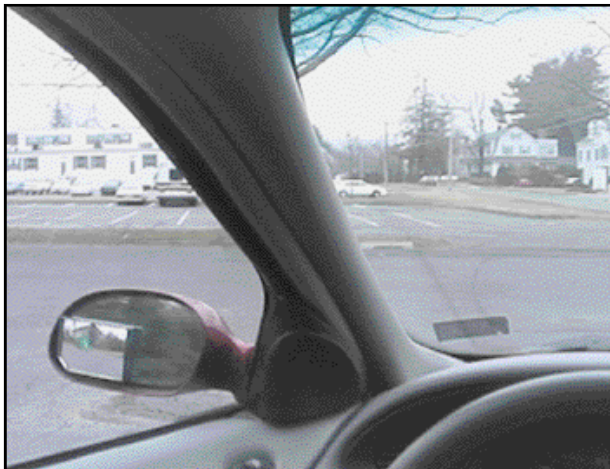


**Click on the transition peg for making a left turn.**



**We are in a parking lot practicing the use of Transition Pegs.**

**The tree, as shown in the photo to the left, is the target.**

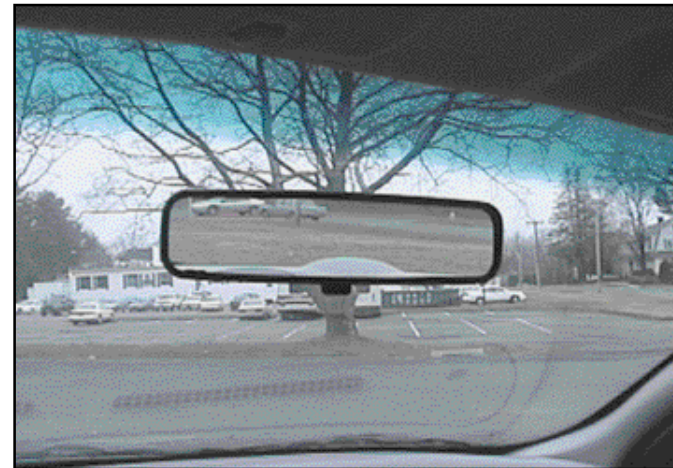
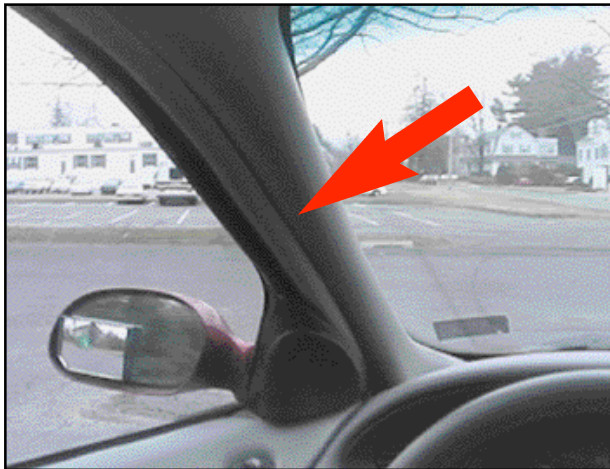


**No, try again. Click on the transition peg for making a left turn.**



**Yes,** the corner post is the transition peg for making a left turn. When the corner post is aligned with the target it is the correct moment to make a change in your Steering, Braking or Acceleration action.

- **Transition Peg For Steering:** is the moment, while making a turn, that the steering wheel should begin to return to a straight (recovery) position.
- **Transition Peg For Braking into turns:** is the moment, while making a turn, when the foot can come off the brake and acceleration can take place.
- **Transition Peg For Acceleration:** is the moment, while making a turn, that an increase in acceleration will have a positive effect upon the vehicle's movement.



The mirror is the transition peg while making a right turn.



Click when ready

**Click on  
the screen  
to the right  
to begin a  
movie.**

Click when  
movie ends.



**Congratulation, you have finished this activity.**

**Please click on the house  
to go to the home page.**

